

REMARKS

Applicants respectfully request entry of the amendments and remarks submitted herein. Claims 18, 32 and 35 have been amended herein to incorporate the language of claim 26. Accordingly, claim 26 has been canceled herein without prejudice to continued prosecution.

Claims 18-25 and 27-42 are currently pending. Reconsideration of the pending application is respectfully requested.

The 35 U.S.C. §102 Rejections

Claims 18, 20-22, 25-26, 30-31, 38 and 40 stand rejected under 35 U.S.C. §102(b) as being anticipated by Fitt et al. (US Patent No. 5,385,608); and claims 18-23, 25-26 and 40-41 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gabel et al. (US Patent No. 3,607,393). These rejections are respectfully traversed.

According to the Examiner, the hypochlorite used in both Fitt et al. and Gabel et al. is equivalent to the claimed 'reactant' (OA at pages 3 and 4). Fitt et al., however, discloses only treatment with hypochlorite (and an optional cross-linking treatment prior to treatment with hypochlorite), while Gabel et al. discloses a two-step treatment; first with a hypohalogenous acid and a halogen (e.g., sodium hypochlorite) and second with an oxidizing agent (e.g., hydrogen peroxide). On the other hand, the pending claims require that the starch is first treated with a reactant to produce a converted starch, and that the resulting converted starch then is bleached. Simply for clarification purposes, Applicants have amended independent claims 18, 32 and 35 to recite that the reactant is "selected from the group consisting of proteases, lipases, hydrogen peroxide, chlorine-free oxidants, alkaline solution, alkaline aqueous solution, and mixtures thereof." It should be clear that Applicants' claimed step of treating the starch with a reactant in independent claims 18, 32 and 35 is different from Applicants' claimed step of treating the resulting converted starch with bleach.

Fitt et al. does not disclose step a) of the claimed methods and only discloses step b), and Gabel et al. discloses performing step b) of the claimed methods before performing step a). Therefore, neither Fitt et al. nor Gabel et al. disclose the claimed methods; a converting step

using one or more of the claimed reactants and then a bleaching step. Thus, neither Fitt et al. nor Gabel et al. anticipate the methods claimed in independent claims 18, 32 and 35.

In addition, Applicants note that claim 37 requires that the starch be converted in the initial step with a protease, and then the resulting converted starch be bleached. Neither Fitt et al. nor Gabel et al. disclose treating the starch with a protease prior to bleaching and, thus, neither Fitt et al. nor Gabel et al. anticipate the methods claimed in independent claim 37.

In view of the amendments and remarks herein, the pending claims are not anticipated by Fitt et al. or Gabel et al. Thus, Applicants respectfully request that the rejections of the pending claims under 35 U.S.C. §102(b) be withdrawn.

The 35 U.S.C. §103 Rejections

Claims 18-23, 25-27, 32, 35 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Russell et al. (1987, *J. Cereal Sci.*, 5:83-100). According to the Examiner, Russell et al. discloses bleaching the starch and then treating the bleached starch with a protease. The Examiner admitted that the order that Russell et al. uses the chlorine and protease is different than the order claimed, but asserted that the “change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary” (OA at page 6). This rejection is respectfully traversed.

It is well established that unsubstantiated assertions can not be used to support a rejection. *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 Fed. Cir. 2001 (the Office “must point to some concrete evidence in the record in support of [its] findings.”). In addition, the Supreme Court, in *KSR Int’l Co. v. Teleflex Inc.* (127 S. Ct. 1727, 1741 (2007)), stated that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (quoting *In re Kahn*, 441 F.3d 997, 988 (Fed. Cir. 2006)) and urged that “this analysis should be made explicit” (*KSR* at 1742).

In the present case, the Examiner’s assertion that changing the order disclosed in Russell et al., in which a starch is exposed to a bleaching agent and then to an oxidizing agent, would have been obvious to one of ordinary skill in the art is conclusory and unsupported, which is improper according to *KSR* and *In re Zurko*. The claimed methods, in which starch is exposed to

an oxidizing (or hydrolyzing) agent and then to a bleaching agent, result in starch having improved viscosity stability and/or improved setting properties upon cooling (compared to starch that has been only bleached; see claim 29). There is nothing in Russell et al. that would prompt one of skill in the art to change the order of the steps, and there is nothing in Russell et al. to suggest that changing the order of the steps would result in the improvements in the properties of the resulting starch as recited in claim 29.

The claimed methods are not obvious over Russell et al. and, in view of the amendments and remarks herein, Applicants respectfully request that the rejections of the pending claims under 35 U.S.C. § 103(a) be withdrawn.

Claims 18-28, 30-38 and 40-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wasserman et al. (US Patent No. 5,959,102) in view of Kettlitz et al. (US Patent No. 6,235,894). According to the Examiner, Wasserman et al. discloses treating starch with a thermolysin and Kettlitz et al. discloses bleaching starch with chlorine. The Examiner asserted that it would have been obvious to one of ordinary skill in the art to combine the method of Kettlitz et al. with the method of Wasserman et al. Applicants respectfully traverse this rejection.

The Supreme Court stated, in *KSR Int'l Co. v. Teleflex Inc.* (127 S. Ct. 1727, 1741 (2007)), that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” In addition, the Federal Circuit also stated, in *Ruiz v. A.B. Chance Co.* (357 F.3d 1270, 1275, C.A. Fed. 2004), that, when

[M]aking the assessment of differences [between the prior art and the claimed subject matter], section 103 specifically requires consideration of the claimed invention ‘as a whole’... The ‘as a whole’ instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention.

In the present case, the Examiner simply combined Reference A (Kettlitz et al. (bleaching)) with Reference B (Wasserman et al. (thermolysin)) to allegedly arrive at the claimed methods, which is contrary to the Courts' instructions in both *KSR* and *Ruiz*. Instead of considering the claimed methods as a whole, the Examiner has improperly broken down the methods into their individual steps, which is a form of hindsight reasoning.

In view of the amendments and remarks herein, Applicants respectfully request that the rejections of the pending claims under 35 U.S.C. §103(a) be withdrawn.

Claims 39-40 and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wasserman et al. in view of Kettlitz et al. further in view of Wongsuragrai et al. (EP 0823439). According to the Examiner, Wongsuragrai et al. discloses using a starch as compression filler in a tablet and asserted that a tablet made from the starch according to the combination of Wasserman et al. and Kettlitz et al. would have been obvious in view of Wongsuragrai et al. This rejection is respectfully traversed.

Claims 39-40 and 42 depend, directly or indirectly, from independent claim 37. As indicated herein, independent claim 37 is novel and non-obvious over the cited references. Therefore, dependent claims 39-40 and 42 also are not obvious. "Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." *In re Fine*, 837 F.2d 1071 (C.A. Fed. 1988), citing *Hartness Int'l, Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed.Cir.1987); *In re Abele*, 684 F.2d 902, 910, 214 USPQ 682, 689 (CCPA 1982); and *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed.Cir.1983). Accordingly, Applicants respectfully request that the rejection of claims 39-40 and 42 under 35 U.S.C. §103(a) be withdrawn.

CONCLUSION

Applicants respectfully request allowance of the pending claims. Please apply the fee for the enclosed Request for Continued Examination (RCE) and any other charges or credits to Deposit Account No. 06-1050.

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